

May 15, 2014

To: FCC
Attn: Federal Communications Commission Staff
1129 20th Street NW Suite 350
Washington, D.C. 20086

From: Paul Spruill
CEO and General Manager
Tideland EMC

Re: Expression of Interest – Rural Trials
Docket No. 10-90

Dear Staff:

Tideland Electric Membership Corporation, headquartered in Pantego, NC, is writing to express interest in filling unmet needs for broadband infrastructure in the most rural areas of our electric cooperative service territory. Our target areas of interest are the underserved mainland areas of Hyde and Dare counties along with several communities in Washington County. We would also inventory existing broadband assets in the most rural areas of Pamlico County to determine the full extent of unmet need, and would expect to provide broadband to these areas through partners.

Background

Tideland EMC is a member-owned distribution electric cooperative serving 22,000 accounts in six eastern North Carolina counties. Our service to the area dates back to 1935 and in the 1970s three electric co-ops and one investor owned utility merged to become Tideland EMC. We maintain four full service offices in Engelhard, Pantego, Grantsboro and Ocracoke. Among our greatest service challenges are low consumer density (8.8 meters per mile of line), low annual revenues per mile of line (\$16,524), and location in a coastal floodplain. Our electric system is 90% residential and the cooperative only serves one industrial account, an egg laying farm. Despite these challenges to service, Tideland EMC has cultivated an outstanding relationship with its member-owners and the community at large and is considered among the most trusted and preferred economic development partners in the six county region. This is evidenced by the cooperative's consistently high member satisfaction ratings which are among the highest in the nation. In 1952, we took the lead role in forming the local telephone cooperative and for many years the electric and telephone cooperatives operated out of our headquarters building in Pantego until federal regulations required that the two entities operate independently. We continue to have a good working relationship with the telephone cooperative, TriCounty Telecom, and currently lease dark fiber from TriCounty for substation communications in Beaufort County. Tideland EMC currently leases fiber to CenturyLink (formerly Embarq) along a submarine communications cable to Ocracoke Island.

Demographic Attributes

Hyde is the second largest county in North Carolina with a population of 5,859. Hyde has no incorporated cities or towns and is designated by the NC Department of Commerce as a Tier 1 county which is given to the most economically distressed counties in the state. Unemployment in Hyde County averages 11 percent. Neighboring Washington County, which also has a Tier 1 designation, has a population of 12,736 with average unemployment of 9.6 percent. Over 37 percent of the county's workforce must commute more than 30 minutes to their place of employment. While Dare County enjoys a Tier 3 designation due to the disparate wealth of oceanfront property owners, the mainland population has not fared nearly as well. Therefore, our efforts in Dare County would target the underserved communities of East Lake, Manns Harbor and Stumpy Point. Pamlico County, with a population of 12,934 residents, is a Tier 2 county but like Dare County there is a great deal of economic disparity due to waterfront vacation homes. Pamlico County's unemployment rate is 9.1 percent and 36 percent of its employed workforce must commute more than 30 minutes to work. All four of these counties have been classified as medically underserved and neither Pamlico nor Hyde counties have a hospital.

Anchor Institutions

Hyde County Schools
Pamlico County Schools
Arapahoe Charter School
Engelhard Medical Center

Proposed Technology

To build or share Fiber Broadband to strategically placed towers that will provide wireless broadband to the remaining underserved communities of Hyde and Pamlico Counties. Each tower site will provide a diameter of 4 - 8 miles of wireless broadband to the community.

State and Local Participation in and/or Support for Project

Tideland EMC values its role locally in improving infrastructure in our communities beyond the traditional enterprise of electric service. Consistent with the value, Tideland EMC anticipates garnering support from Hyde County Government and Pamlico County Government should we receive funding for any future project.

Existing Providers

In 2010, TriCounty Telecom was the recipient of \$14.1 million in "last mile" funding allowing the co-op to deploy an advanced fiber optic network with inherent capability to deliver broadband service speeds of 80 Mbps. The project's coverage area included portions of Beaufort, Hyde and Washington counties. In addition, TriCounty has fiber running to, or near, Tideland's substations in these counties. Hence, Tideland is planning to lease TriCounty's fiber, connecting to its HQ and branch offices and to MCNC.

Project Timeline

Tideland EMC expects to continue in 2014 quantifying existing infrastructure in its underserved target areas discussed in "Scalability" below. Should Tideland EMC receive funding, we would expect to seek additional partners to light a new fiber or activate broadband for the "last mile" and to deliver service to homes and to Community Anchor Institutions (CAI's). Such a project will require 2-3 years to complete.

Scalability

Tideland EMC will limit its scalability to the most underserved areas in its territory including but not limited to eastern Hyde County and Eastern Pamlico County.

Infrastructure Investment

Our estimates for this project include:

- * Fiber - \$3,000,000 per 100 miles.
- * Towers and their associated wireless equipment and generator - \$300,000 per site each reaching a diameter of 4 - 8 miles of the community.

Capital Infrastructure Investment Needed for Project - Rough Estimate

1. (35) Miles Fiber - From Tideland's existing Fiber to and within Hyde County	\$1,050,000.00
2. (4) Towers - Hyde County (For Community)	\$1,200,000.00
3. (65) Miles Fiber - Pamlico County (For Tideland & Community)	\$1,950,000.00
4. (6) Towers - Pamlico County (For Community)	\$1,800,000.00

Total \$6,000,000.00

Below are some screenshots illustrating the need in this area.

<http://e-ncbroadband.org/>

